



# Defense Strategy and Transformation Seminar

General G. S.  
Martin  
19 July 2005

*Integrity - Service - Excellence*

# Air Force Materiel Command

*Deliver War-Winning. . .*

*-- Technology*

*-- Acquisition Support*

*-- Sustainment*

*. . . Expeditionary Capabilities to the Warfight*



# The Air Force Vision

## AF Vision: 1990s

**Global Engagement**

- Global Presence
- Global Reach
- Global Power

## CSAF Perspective

**Organizing Constructs**

- Persistence
- Control over the Target
- Effective Battlespace Awareness
- One Time of Flight

## QDR 2001

**Core Strategic Capabilities**

- Persistence C4ISR
- Global Mobility
- Global Strike



# The Air Force S&T Vision

## AF Vision: 1990s

- Global Presence
- Global Reach
- Global Power

## CSAF Perspective

- Persistent Over the Target
- Continuous Battlepace Awareness
- One Time of Flight

## QDR 2001

- Persistent C4ISR
- Global Mobility
- Global Strike

ANTICIPATE

Organizing Constraints

Core Strategic Capabilities



ANYONE, ANYTIME, ANYWHERE

# Focused Long-Term AF Organizing Constructs Challenges

**Persistence**

**Cursor Over the  
Target**

**Predictive  
Battlespace  
Awareness**

**One Time of Flight**

- Tactical Space Access and Operations

- Globally Maneuver to / thru Denied Environments

- Tailored, Persistent Collection for PBA

- Collect / Deliver Effects for Difficult Urban Targets

- Remotely Sense and Render Ineffective CBRNE

- Covertly Deliver Cyber Effects

- Anticipatory Synchronized Operations

- Complete All Missions with Impunity

- Sustainment Transformation thru

# Focused Long-Term Challenges

Persistence

Cursor Over the Target

Predictive Battlespace Awareness

One Time of Flight

Tactical Space Access and Operations

Globally Maneuver to / thru Denied Environments

Tailored, Persistent Collection for P

ANTICIPATE

Collect / Deliver  
Difficult Urban

Air

FIND

ASSESS

FIX

Remotely Sense and Render  
Ineffective CBRNE Targets

ENGAGE

TRACK

TARGET

Covertly Deliver Cyber Effects

ANYONE, ANYTIME, ANYWHERE

Cyber

Anticipatory Synchronized Operations

Complete All Missions with Impunity

Sustainment Transformation thru Technology (ST3)



# Air Force Materiel Command

*Deliver War-Winning. . .*

*-- Technology*

*-- Acquisition Support*

*-- Sustainment*

*. . . Expeditionary Capabilities to the Warfight*



# **AF Acquisition Today**

**Despite World Class Performance...**

**AMRAAM**

**C-17**

**F/A-22**

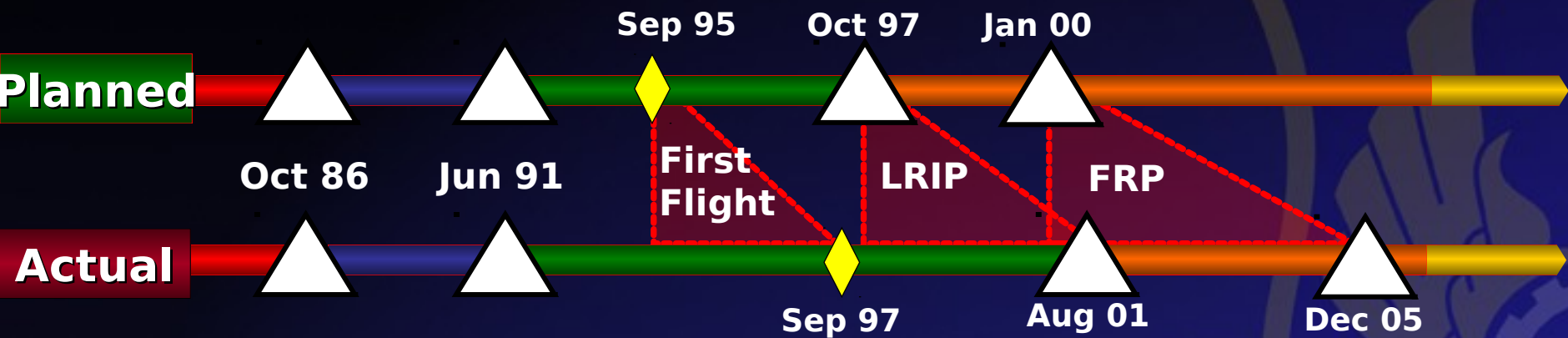
**Small Diameter Bomb**



**...There Are Serious Shortcomings in the  
Way We Conduct Our Acquisition  
Process**



# F/A-22



## Requirements & Configuration Control

- Total Numbers of Aircraft
- Air to Ground Capability
- Link 16

## Realistic Cost / Schedule

- Technical Challenges Greater Than Anticipated
- Systems Integration
- Contractor Performance

## Program Management

- Systems Engineering
- Quality Control
- Manufacturing Process



# Small Diameter Bomb

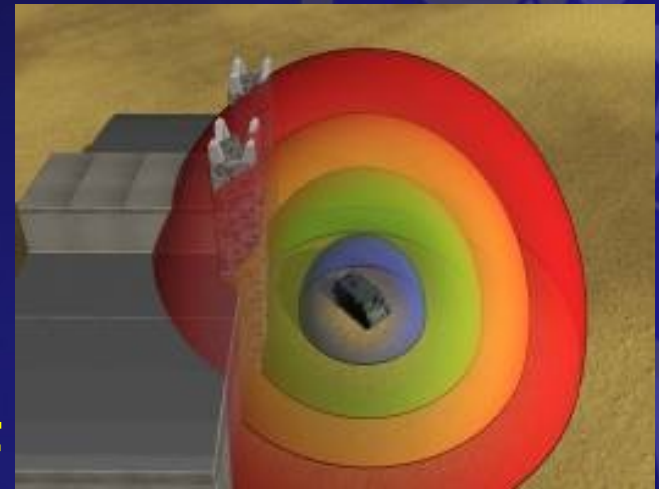


**Rigorous Configuration Control**

**Realistic Schedule / Cost Estimates**

**Stable Requirements / Funding**

**Disciplined Program Management**



# Acquisition Shaping Factors

## Environme

2005  
 GWOT  
 Industry Consolidation  
 2000  
 Procurement Holiday  
 Downsizing  
 Peace Dividend  
 Desert Storm  
 1990  
 End of the Cold War  
 Baldridge / JD Power Awards  
 US Quality Movement  
 Japanese Industry Boom  
 1980  
 Acquisition Overruns

## Policy

Space Commission  
 FAR Part 12  
 Federal Acquisition Requirements Act  
 Federal Acquisition Streamlining Act  
 Clinger-Cohen Act  
 Acquisition Reform  
 Goldwater Nichols Act  
 Packard Commission  
 in Contracting  
 Grace Commission

## Implementatio

Space  
 Split  
 Acquisition  
 A/C, Armament, & C2  
 Program Executive Office Restructure  
 New DoD 5000 Series  
 TSPR / TSSR  
 COTS - Commercial Off-the-Shelf  
 Mil-Specs / Mil-Standards  
 Elimination  
 Non-Developmental Items  
 New DoD 5000 Series  
 Program Executive Office Creation  
 New Dod 5000 Series



# Aerospace Industry

GD Ft. Worth  
MEL Defense Systems  
Sanders Associates  
Lockheed  
GE Aerospace Business  
Martin Marietta  
Gould (Ocean Systems)  
GD Space Systems  
Honeywell (Electric-optics)  
Fairchild Westan Systems  
Loral  
Goodyear Aerospace  
BDM International  
Librascope  
LTV (Missile Business)  
IBM Federal Systems  
Unix (Defense Electronics)  
Comsat  
Hughes Electronic Satellite  
Jeppensen Sanderson  
Hughes Helicopters  
McDonnell Douglas  
Boeing  
Argo Systems  
Litton Precision Gear  
Rockwell International  
Automatic  
Marine Sys Group of Alliant  
CAE Link  
Magnavox Electronics  
GD (Missile Business)  
Radiffusion Simulation  
Hughes Aircraft  
GM (Hughes Aircraft)  
Corporate Jets  
Raytheon  
E-Systems  
Chrysler Tech Airborne  
TI Defense

Princess Technologies  
GTS Govt Systems  
NASCO Holdings  
Teledse Vehicle Systems  
Bath Iron Works  
Cessna Aircraft  
Chrysler Defense  
General Dynamics  
Ceridian's Computing Devises Int'l  
Defense and Armament Sys  
Gulf Stream Aerospace  
K-C Aviation  
Galaxy Aerospace  
Motorola Info Sys Group  
Avondale Industries  
TASC  
PRC  
GI Defense  
Litton Industries  
Varian (Solid State Elec.)  
Grumman  
Northrop  
Thought Aircraft  
Westinghouse Defense  
Syscon  
Logicon  
Geodynamics  
Ryan Aeronautical  
Comptek  
Federal Data  
Steering Software  
Aerojet  
Newport News Shipping  
TRW

1980

GD Ft. Worth  
MEL Defense Systems  
Sanders Associates  
Lockheed  
GE Aerospace Business  
Martin Marietta  
Gould (Ocean Systems)  
GD Space Systems  
Fairchild Westan Systems  
Loral  
Goodyear Aerospace  
BDM International  
Librascope  
LTV (Missile Business)  
IBM Federal Systems  
Unix (Defense Electronics)

**Lockheed  
Martin**

Hughes Electronic Satellite  
Jeppensen Sanderson  
Hughes Helicopters  
McDonnell Douglas  
Boeing  
Argo Systems  
Litton Precision Gear  
Rockwell International  
Automatic

**Boeing**

CAE Link  
Magnavox Electronics  
GD (Missile Business)  
Radiffusion Simulation  
Hughes Aircraft  
GM (Hughes Aircraft)  
Corporate Jets  
Raytheon  
E-Systems  
Chrysler Tech Airborne  
TI Defense

**Raytheon**

**Post  
Consolidation**

Princess Technologies  
GTS Govt Systems  
NASCO Holdings  
Teledse Vehicle Systems  
Bath Iron Works  
Cessna Aircraft  
Chrysler Defense  
General Dynamics  
Ceridian's Computing Devises Int'l  
Defense and Armament Sys  
Gulf Stream Aerospace  
K-C Aviation  
Galaxy Aerospace

**General  
Dynamics**

Avondale Industries  
TASC  
PRC  
GI Defense  
Litton Industries  
Varian (Solid State Elec.)  
Grumman  
Northrop  
Thought Aircraft  
Westinghouse Defense  
Syscon  
Logicon  
Geodynamics  
Ryan Aeronautical  
Comptek  
Federal Data  
Steering Software  
Aerojet  
Newport News Shipping  
TRW

**Northrop  
Grumman**

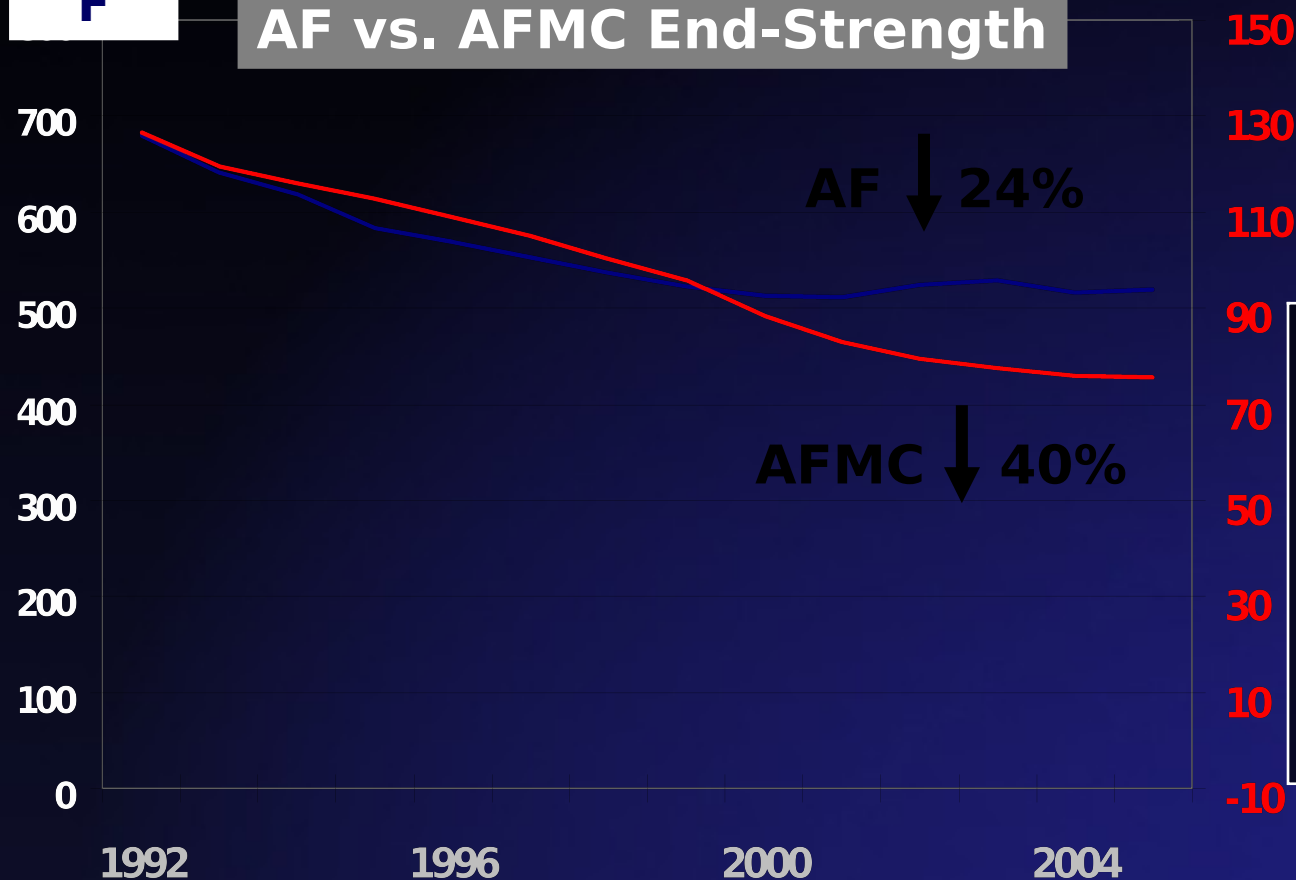
General Electric  
Pratt & Whitney  
**Other**  
Rolls Royce  
Allison

# AF End-Strength Reductions

USA  
F

AFMC

AF vs. AFMC End-Strength



AFMC Reductions

- Cost Estimators
- Program Management
- Developmental Planning
- Engineering
- Contracting
- Test & Evaluation

# The Path Ahead

---

- **Develop More Rigorous Program Management Training and Accountability Standards**
- **Develop and Program to Realistic Cost Estimates**
- **Ensure Industrial Base Provides for Adequate Competition**
- **Ensure Our Contract Awards Allow Appropriate Oversight**





# Air Force Materiel Command

*Deliver War-Winning. . .*

*-- Technology*

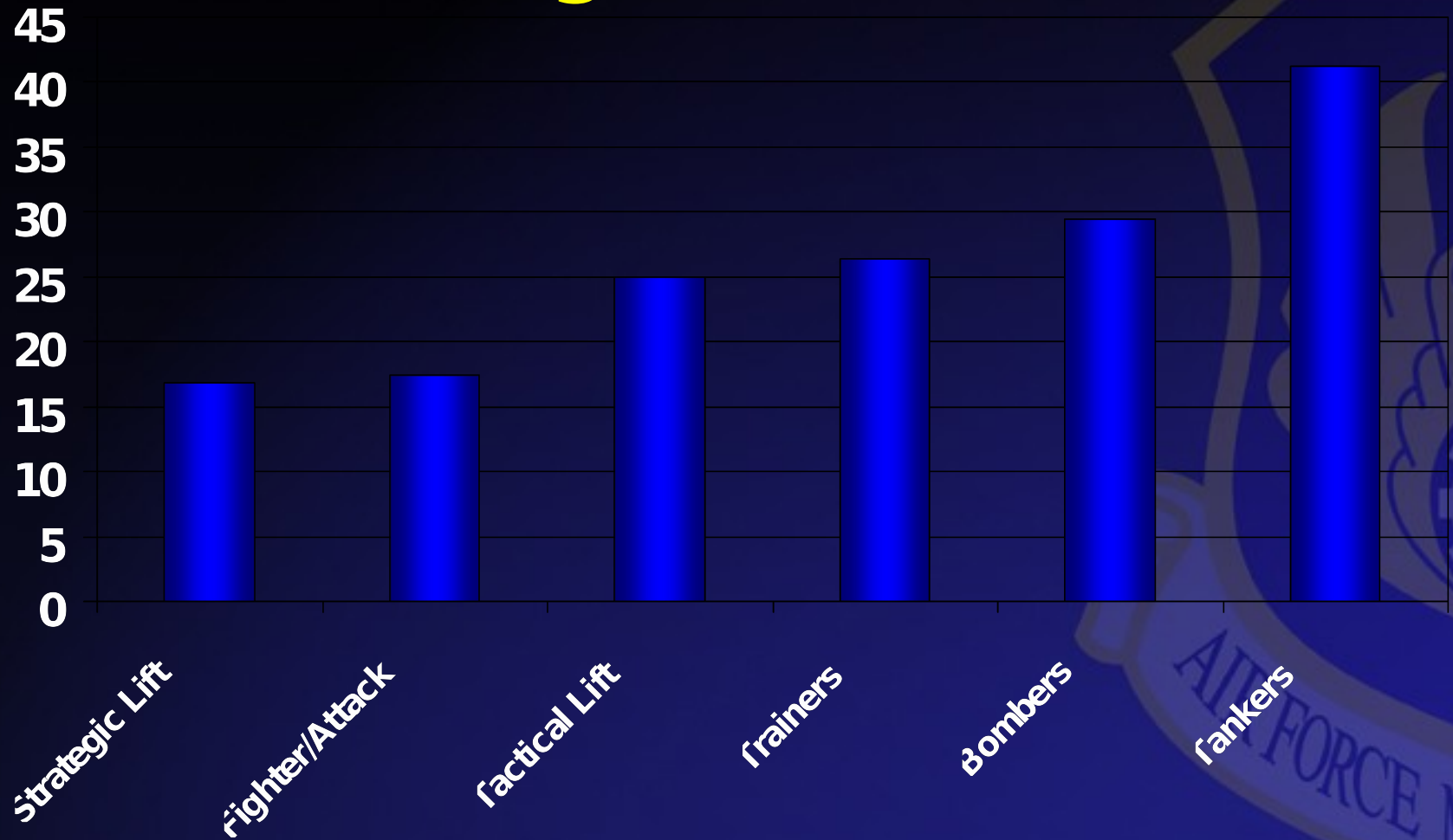
*-- Acquisition Support*

*-- Sustainment*

*. . . Expeditionary Capabilities to the Warfight*

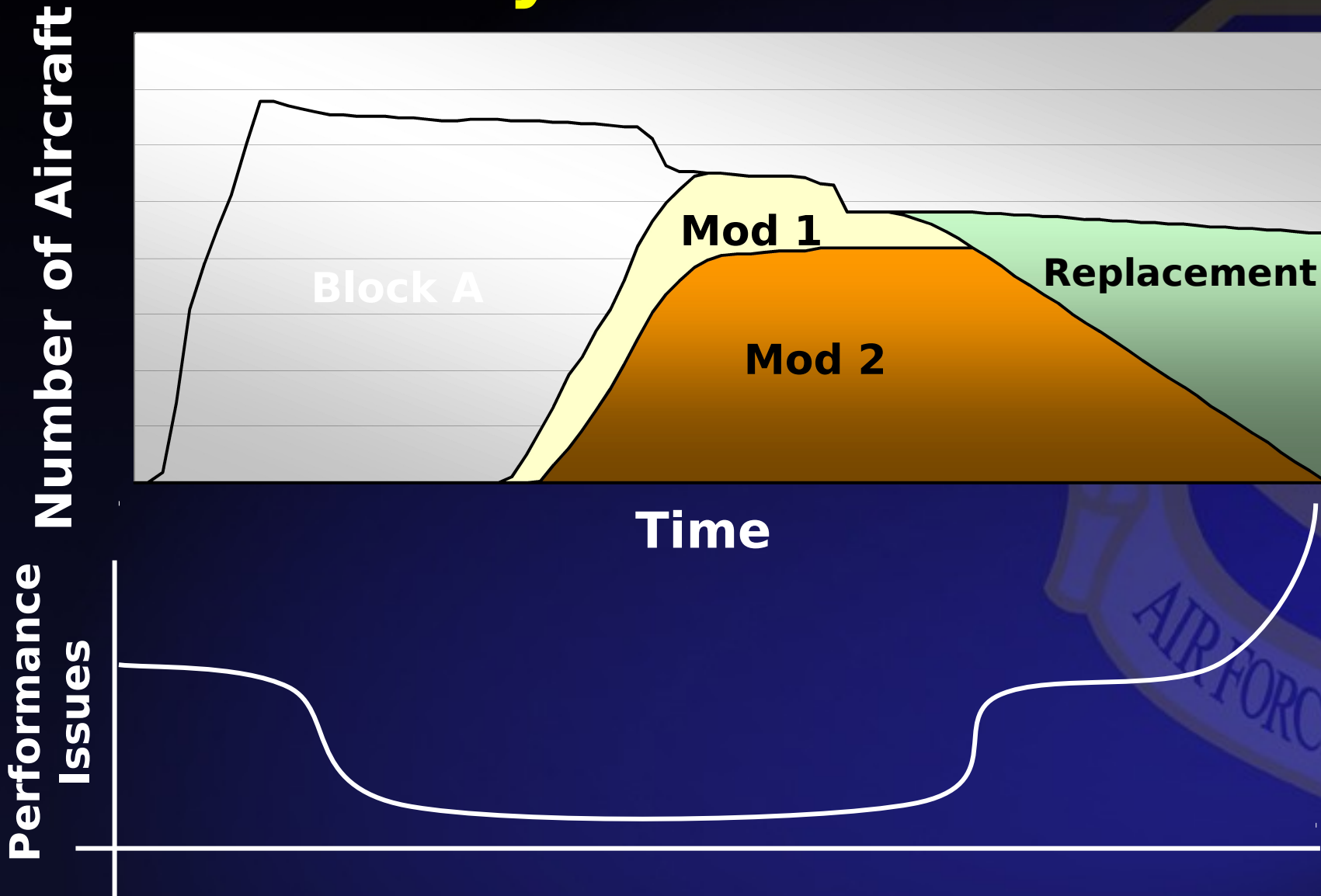


# Aircraft Age



**Average Age of AF Aircraft: 27 Years**

# MDS Life-cycle





# Expeditionary Logistics for the 21<sup>st</sup> Century: Transformation

eLog21

10% Decrease in  
Operating Costs  
by FY 2010



20% Increase in  
Equipment Availability

AFMC  
Initiatives



20% ↓ Turnaround Days  
100% On-Time Delivery  
10% ↓ in Costs  
20% ↑ in A/C Avail

(DMT)



50% ↓ Cycle Time  
20% ↑ Materiel Avail  
20% ↓ Purchase and Repair

(PSCM)



10% ↓ Cycle Costs  
Project Actual Life Cycle  
Costs within 10%  
20% ↑ Weapon Sys Avail

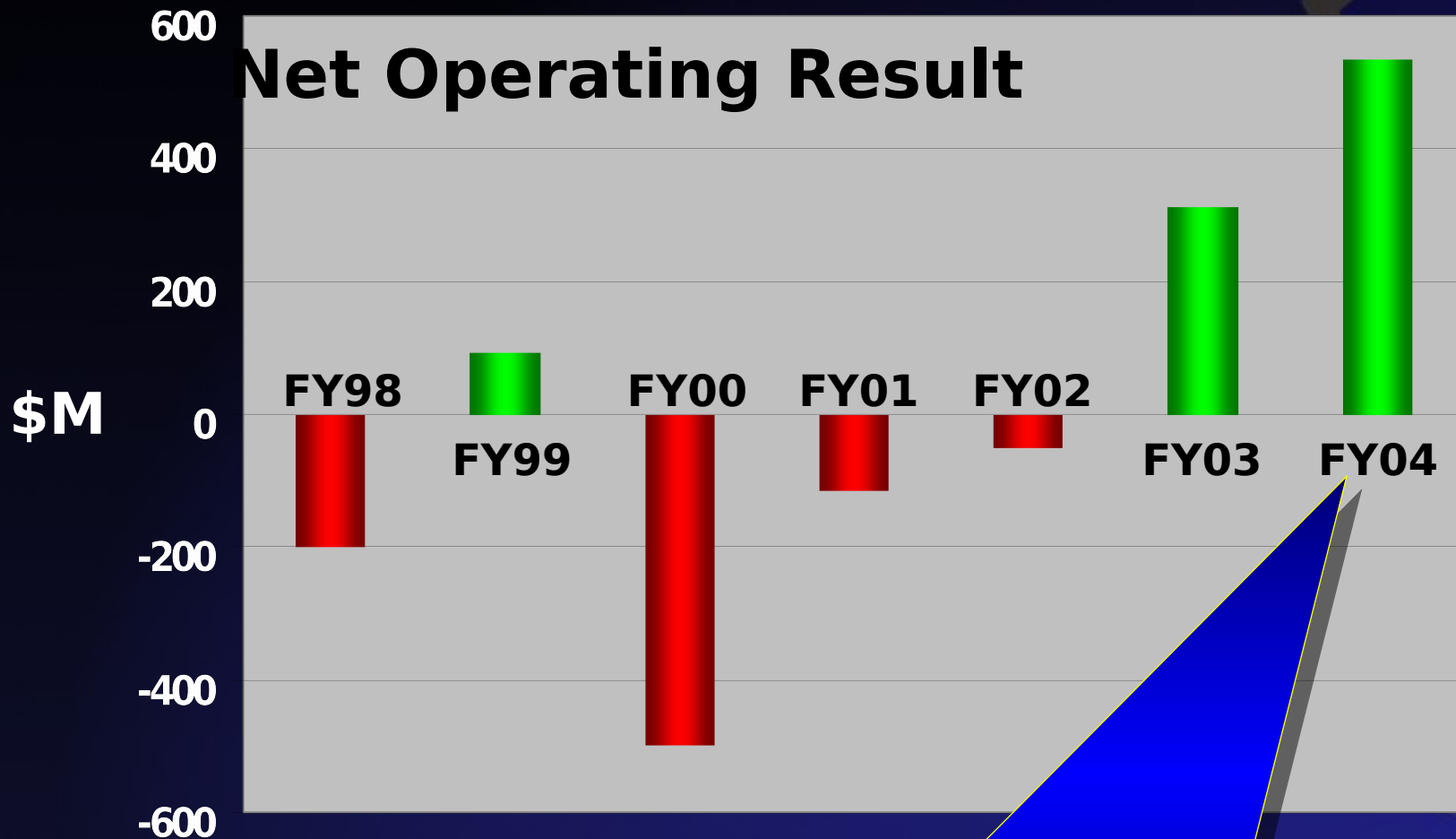
(PSC)

Additional Goals

# Transformation

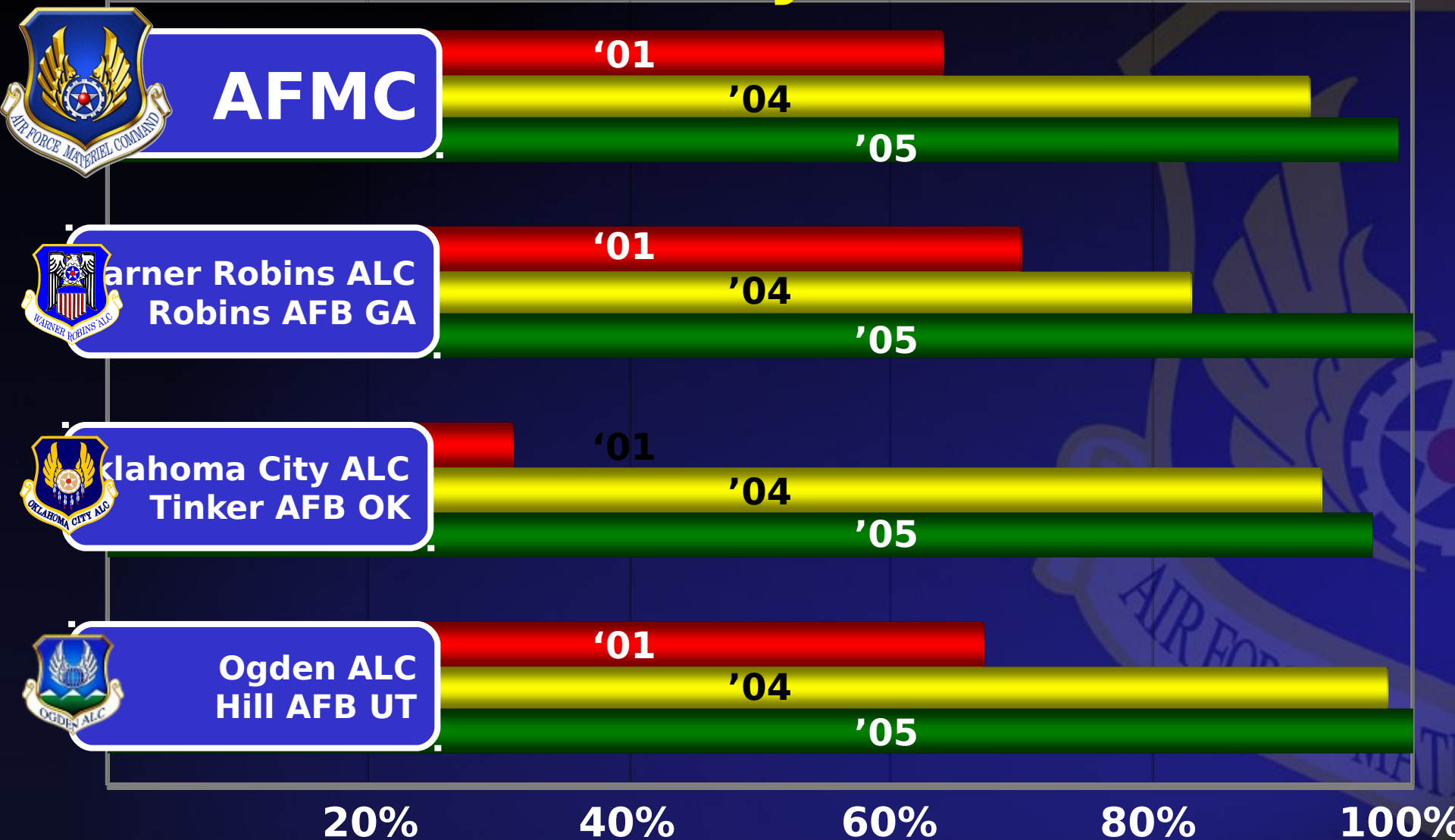
## Impact

Depot Maintenance Activity Group / Materiel Support Division



**\$570M Returned for**

# On-Time Delivery





# **PSCM Transformation: Commodity Councils**

**Landing Gear**  
**Support Equipment**  
**Instruments**  
**A/C Accessories**  
**Secondary Power**  
**Communication**  
**Electronics**  
**A/C Propulsion**  
**A/C Structural**

**Air Force  
Spares  
Procurement**  
  
**26,824 Total  
Line Items**

**92% of Air  
Force Spares  
Transactions**

# PSCM Transformation: Commodity Councils

## Commodity Council

**Air Force  
Spares  
Procurement**

**26,824 Total  
Line Items**

Line Items	Total # of KTs	KT Actions
Supporting Equipment	1,034	905
Landing Gear	1,154	1,154
Instruments		
A/C Accessories		
Secondary Power		
Communication		
Electronics		
A/C Propulsion		
A/C Structural		

Line Items/KT	Actions Per KT
1.14	1.28

**92% of Air  
Force Spares  
Transactions**

# PSG Transformation: Results Thus Far

Commodity Council	Line Contracts Before	Line Contracts After	Actions Taken	% Decrease
Landing Gear	732 / 905	6		99%
Landing Gear Instruments	1,034 / 905	1,154	1.14	1.28
	289 / 1,128	5		98%
Support Equipment	309 / 4,159	9		97%
	286 / 2,148	8		97%
A/C Accessories	83 / 180	5		94%
Secondary Power	3,541 /	15		99%
Comm / Electronics	4,271			

**Strategies for Propulsion & A/C Structural to Be Complete by Jul & Sep 05 Respectively**



# Product Support Campaign

## Total Life Cycle System Management

**Concept Refinement**

**Technology Development**

**System Development and Demonstration**

**Production and Deployment**

**Operations and Support**

- Anticipation of Sustainment Issues

- Life Cycle Cost Planning

- Continuous Development of Effective Technical Orders
- Manpower Requirements and Assignment Planning

- Sustainment Process and Resource Planning

- Sustainment Infrastructure Planning

- System Modernization and Upgrade

- Recapitalization Analysis and Planning

## Life-Cycle Logistics

# The Bottom Line

---

**Our Vision...**

***To Be A Valued Team Member . . .***

***Of The World's Most Respected  
Air & Space Force***

**War-Winning Capabilities...On Time, On**

